

**Abstract of the Invention**

An information retrieval system, including a learning and real-time classification methodology, is provided in accordance with the present invention. The system includes a hierachal analysis component that receives a query and processes probabilities associated with N categories, each category having one or more topics, wherein N is an integer. An interactive component drives clarification dialog that is derived from the query and the probabilities associated with the N categories and the one or more topics. The clarification dialog, driven by a rule-based policy, a decision-theoretic analysis considering the costs of dialog to focus the results versus the costs of browsing larger lists, or combinations of rules and decision-theoretic analysis is employed when valuable to determine at least one category of the N categories to facilitate retrieval of at least one of the topics.

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